Listing of Claims

1. (Previously presented) A process for the direct production of desacetylcephalosporin C comprising culturing a strain of *Acremonium chrysogenum* containing nucleic acid encoding enzymes for cephalosporin C biosynthesis and a recombinant nucleic acid encoding *Rhodosporidium* cephalosporin esterase under conditions wherein the temperature is about 22°C to about 29°C and the pH is about 5.5 to about 7.5 resulting in the synthesis of cephalosporin C and expression of cephalosporin esterase wherein the cephalosporin C so produced is converted to desacetylcephalosporin C and the chemical breakdown of cephalosporin C to 2-(D-4-amino-4-carboxybutyl)-thiazole-4-carboxylic acid is less than 40%.

2. Cancelled

3. (Original) The process of Claim 1 wherein the chemical breakdown of cephalosporin C to 2-(D-4-amino-4-carboxybutyl)-thiazole-4-caroxylic acid less than 30%.

4. (Original) The process of Claim 1 wherein the chemical breakdown of cephalosporin C to 2-(D-4-amino-4-carboxybutyl)-thiazole-4-caroxylic acid less than 20%.

5. (Original) The process of Claim 1 wherein the chemical breakdown of cephalosporin C to 2-(D-4-amino-4-carboxybutyl)-thiazole-4-caroxylic acid less than 10%.

6. (Original) The process of Claim 1 wherein the chemical breakdown of cephalosporin C to 2-(D-4-amino-4-carboxybutyl)-thiazole-4-caroxylic acid less than 5%.

7. Cancelled

8. (Previously presented) The process of Claim 1 carried out at a temperature of about 25°C to about 29°C and a pH of about 6.2 to about 7.0, during the vegetative cell growth phase; and at a temperature of about 22°C to about 26°C and a pH of about 5.7 to about 6.5 during the desacetylcephalosporin C production phase.

9. (Previously presented) The process of Claim 1 wherein the recombinant nucleic acid encoding *Rhodosporidium* cephalosporin esterase is DNA.

10. (Previously presented) The process of Claim 1 wherein the recombinant nucleic acid encoding *Rhodosporidium* cephalosporin esterase is DNA and a part of a plasmid.

11. (Previously presented) The process of Claim 10 wherein the recombinant nucleic acid encoding *Rhodosporidium* cephalosporin esterase has the sequence of SEQ ID NO: 1 or 3.

12. Cancelled.

13. Cancelled.